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REMARKS

The Office Action mailed on March 24, 2006 has been reviewed and the Examiner's comments have been carefully considered. Claims 14-78 were previously canceled and Claims 1-13 and new claims 79-83 are now pending in this case.

Applicant amends the specification to include information regarding the level of contaminants in the working fluid that was disclosed in original filed claims 5 and 8. Paragraph 80 now includes text, in which according to an embodiment of the invention, the impurities of the working fluid are not more than approximately 20%.

Claim 1 is now amended to correct deficiency in antecedent basis of the word "permeate." Claim 1 now recites a step of filtering, the working fluid through a cross membrane filter to produce a permeate, obtained by the filtration of the working fluid. Support for this amendment is found throughout the written description, including paragraphs 77-78 (page 25, line 24 – page 26, line 4).

Claim 3 is now amended to place the claim in method format.

Claims 3 and 10 are now amended to recite that passing working fluid vapors against a spinning disc removes working fluid or water vapor, or both, from the air.

Claim 11 which ultimately depends from claim 8 is now amended to specify that the working fluid is filtered through a cross flow membrane. Support for the cross flow membrane filter is found in paragraph 77 of the written description (page 25, line 24– page 26, lines 1-2).

New dependent claims 79-83 have been added. Support for claim recitation relating to the use of the permeates to be combined with an adjuvant to clean fabrics can be found in the written description in paragraph 80, page 27, lines 7-8 in which the permeates can be pumped from the clean tank to the wash unit for reuse. Support for claim recitation relating to a substantially purified working fluid that is greater than about 90 percent free from contaminants can be found in paragraph 80, page 27, lines 5-8 of the written description.

I. Claims 1, 6, 8, and 9 are not obvious under 35 USC §103(a) and (over *Estes, et al.*) (US 2002/0056164) in view of "Membranes the Finest Filtration" (http://www.gewater.com/library/tp/698_Membranes_the.jsp).

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The USPTO states that it "would have been obvious to ordinary skilled in the art at the time the mention was made to modify the methods taught by Estes, et al. by incorporating the cross flow membrane filters taught in *Membranes the Finest Filtration* document because the document recites the utility of these membranes and laundry applications."

Applicants' maintain that a prima facie case of obviousness under 35 U.S.C. §103(a) has not been established by the cited art of record. To establish a prima facie case, the USPTO must satisfy requirements specifically that the prior art relied upon must contain some suggestion or incentive that would have motivated one of ordinary skilled in the art to combine references. See *Karsten Mfg. Corp. v. The Cleveland Golf Co.* 242F.3d1376, 1385,58USPQ2d 1286 1293 (Fed. Cir. 2001). The reference *Membranes the Finest Filtration* mentions laundering but makes no mention to non-aqueous laundering and non-aqueous fluids. The reference merely lists "Commercial laundry water and heat reuse" as a bullet item under "Waste Treatment" applications. The USPTO merely considers the word "laundering" as a basis of motivation and rejection without consideration of the types of materials filtered. The *Membranes the Finest Filtration* reference makes no mention of non-aqueous working fluids as a permeate of the filtration, and if anything, suggests traditional aqueous or water laundering with water being the recovered permeate.

Furthermore, the cross flow membrane technology relates exclusively to specific applications and examples in which water is the permeate, or the material which pass through the membrane, whereas in Applicants' invention the non-aqueous working fluid is the permeate. The reference *Membranes the Finest Filtration* provides no motivation or suggestion of cross flow filtering as a means to obtain non-aqueous working fluid as the permeate. The teaching of the reference must be taken for what it fairly suggests. Lack of evidence of motivation to combine is a critical defect in establishing a prima facie case of obviousness.

Another necessary requirement of establishing a prima facie case is that the proposed modification of the prior art must have had a reasonable expectation of success determined from the vantage point at the time the invention was made. See *Amgen, Inc. v Chugai Pharm Co.*, 927 F2d 1200, 1209, 18USPQ2d 1016, 1023 (Fed. Cir. 1991). The USPTO has failed to establish that the combination of references could result in filtering to obtain a permeate of non-aqueous working fluid. Aside from the references silence as to non-aqueous working fluids, the reference

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Membranes the Finest Filtration, discloses applications and processes employing cross flow filtration which produce water as the permeate, for example, potable water from seawater and sewage water recovery. As mentioned above, Applicants' invention discloses filtration in which the non-aqueous working fluid is the permeate and the cross flow membrane is used to remove the water and contaminants to produce a permeate and a concentrate waste. [See paragraph 77, page 26, lines 1-2.] The written description also states in paragraph 81, page 27, lines 20-22 states, "...a preferred membrane would be one that would remove all particulate matter, separate micelles, separate water and other hydrophilic materials, separate hydrophobic materials that are outside the solubility region of the working fluid..." The references, without Applicants' own teachings, provide no suggestion that that would indicate any success for filtering non-aqueous fluids as a permeate and reducing or eliminating the amount of water from the working fluid to be filtered. Because the reference indicates water as the permeate, the reference *Membranes the Finest Filtration* would actually teach away from the results of recovering non-aqueous working fluid, rather than water, as a permeate. Even if the words "commercial laundering water" provided a suggestion to use a cross-membrane filter for non-aqueous working fluids, according to the position taken by the USPTO, an "obvious to try" standard is not the proper standard for a reasonable expectation of success and represents an insufficient basis to establish a prima facie case of obviousness.

With regard to claim 8, neither of the references specifically disclose that the working fluid has an impurity that is not more than approximately 20%. The Office Action states that "Estes teaches similar compositions and similar methods" and that "one would expect that these similar compositions treated by similar methods would have similar impurity levels." However, claim 8, encompasses several possible embodiments in which the working fluid may not only be substantially pure, but also includes, for example, a portion of recovered working fluid from another wash cycle, or as another example, the working fluid includes contaminants obtained from the fabric before the working fluid is filtered. The argument by the USPTO that amount of contaminants is less than 20% because the reference "teaches similar compositions and similar methods" is pure conjecture. A prima facie case of obviousness requires that the combination of references must teach or suggest all the limitations of the claims. See *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

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In summary, the methods taught by Estes, et al. and *Membranes the Finest Filtration* fail to provide a prima facie case of obviousness for the reasons described above with respect to claims 1, 6, 8 and 9 in over Estes, et al. (US 2002/0056164) in view of "Membranes the Finest Filtration." Accordingly, Applicants respectfully request the allowance of claims 1, 6, 8 and 9 which are believed to be in condition for allowance.

II. Claims 1, 6, 8 and 9 are not obvious over 35 USC 103(a) over Estes, et al. (US 6045588) in view of "Membranes of the Finest Filtration"

(http://www.gewater.com/library/tp/698_Membranes_the.jsp)

The USPTO states that it would have been obvious to ordinary skilled in the art at the time the mention was made to modify the methods taught by Estes et al. by incorporating the cross flow membrane filters taught in *Membranes the Finest Filtration* reference because the reference recites the utility of these membranes and laundry applications.

The methods taught by Estes, et al. and *Membranes the Finest Filtration* fail to provide a prima facie case of obviousness for the reasons described above with respect to claims 1, 6, 8 and 9 in over Estes, et al. (US 2002/0056164) in view of "Membranes the Finest Filtration." Specifically, the combination of filtering non-aqueous working fluid to produce a permeate comprising non-aqueous working fluid is not at all suggested by the reference. Accordingly, Applicants respectfully request the allowance of claims 1, 6 and 9 which are believed to be in condition for allowance.

Also, with regard to claim 8, neither of the references specifically disclose that the working fluid has an impurity that is not more than approximately 20% as discussed above. Accordingly, Applicants respectfully request the allowance of claim 8 which is believed to be in condition for allowance.

III. Claims 1, 6 and 7 are not obvious 35 USC 103(a) over Estes, et al. (US 6045588) in view of "Membranes of the Finest Filtration"

(http://www.gewater.com/library/tp/698_Membranes_the.jsp) and Aouad, et al. (US6770615)

The USPTO states that it would have been obvious to ordinary skilled in the art at the

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time the mention was made to modify the methods topped by Estes, et al. (US 6045588) by incorporating the cross flow membrane filters taught in *Membranes the Finest Filtration* document because the document recites the utility of these membranes and laundry applications. Furthermore, the USPTO states that "Aouad et al. teaches non-aqueous laundry detergent compositions comprising surfactants with HLB values ranging from 10-16" and "one of ordinary skill in the art it is well known in the art would have motivated to combine the teachings of the references."

With respect to claims 1 and 6, the methods taught by Estes, et al. and *Membranes the Finest Filtration* fail to provide a prima facie case of obviousness for the reasons described above with respect to claims 1 and 6 described above with respect to claims 1, 6, 8 and 9 in over Estes, et al. (US 2002/0056164) in view of "Membranes the Finest Filtration." Specifically, the combination of filtering non-aqueous working fluid to produce a permeate comprising non-aqueous working fluid is not at all suggested by the reference.

Applicants' claim 7, which ultimately depends from claims 1 and 6, recites surfactants having HLB values ranging from 3-14. Applicants' non-aqueous, non-reactive working fluid, or bulk fluid, which is not intended to react with the fabric for cleaning, however, includes a carrier system that delivers a cleaning composition to the article to be cleaned. Applicants have found that surfactants having HLB values ranging from 3-14 function well as a component of a carrier system for the working fluid, or bulk fluid. The Aouad et al. reference has nothing to do with non-aqueous cleaning methods in which the working fluid comprises substantially non-aqueous chemicals, but rather, Aouad et al. narrowly pertains to a detergent formulation used in a water-based, washing system. Specifically, Aouad et al. disclose the use of surfactants as a component of liquid detergents for water-based wash systems, and the surfactants are used to keep the other chemical constituents such as microspheres and binding agents stable in the bottle of detergent. (See column 2, lines 32-47, and column 3 lines 27-37.) The use of the surfactants for detergent that is ultimately used in water-based laundering as disclosed in Aouad et al. would not lead one of ordinary skill in the art to arrive at Applicants' use of surfactant for a different function as a carrier in a non-aqueous, non-reactive working fluid in dry-cleaning. The USPTO must put forth some objective teaching of the references, when each is read as a whole, that would lead one of ordinary skill in the art to combine relevant teachings of the references. Merely pointing out that

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the references that contain the elements of Applicants' claim is not enough to establish a prima facie case of obviousness.

Accordingly, Applicants respectfully request the allowance of claims 1, 6 and 9 which are believed to be in condition for allowance.

IV. Claims 1, 2, 5, 6 and 8-11 are not obvious 35 USC 103(a) over Hallman, et al. (US 2003/0196277) in view of "Membranes of the Finest Filtration" (http://www.gewater.com/library/tp/698_Membranes_the.jsp) and Aouad, et al. (US6770615)

The USPTO states that it would have been obvious to ordinary skilled in the art at the time the mention was made to modify the methods taught by Hallman et al. by incorporating the cross flow membrane filters taught in *Membranes the Finest Filtration* reference because the reference recites the utility of these membranes and laundry applications. Further, the USPTO states that although Hallman et al. is silent as to the impurity levels, KB values, surface tension and water solubility of the solvent, the teachings of Hallman et al. would encompass working fluids with these properties because Applicant recites siloxane based solvents.

The methods taught by Hallman et al. (US 2003/0196277) and the reference entitled *Membranes the Finest Filtration* fail to provide a prima facie case of obviousness for the reasons described above with respect to claims 1, 6, 8 and 9 in over Estes, et al. (US 2002/0056164) in view of "Membranes the Finest Filtration." Specifically, the combination of filtering non-aqueous working fluid to produce a permeate comprising non-aqueous working fluid is not at all suggested by the reference.

Claims 2 which depends from claim 1, and claim 11 which ultimately depends from claims 1 and 10, recite a further step of filtering the permeate through an adsorbent bed filter. The cited reference do not disclose filtering through a cross flow membrane to produce a permeate that is then filtered through an adsorbent bed filter. Neither of the references alone or in combination suggest or infer a combination of the filtering methods disclosed by Applicants. Furthermore, given that Hallman et al. employ mechanical filtration, specifically, packed bed columns (page 3, paragraph 0033-0040) is further evidence that one of ordinary skill in the art would not be motivated to combine cross flow filtration with the types already disclosed.

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Claims 3 and 4 recite a method for reducing water vapor and working fluid in the air by passing the vapors against a spinning disc. The cited references do not make mention of this.

With regard to claims 5 and 8, none of the references specifically disclose that the working fluid has an impurity that is not more than approximately 20% as discussed above.

Accordingly, Applicants respectfully request the allowance of claims 1, 2, 5, 6 and 8-11 which are believed to be in condition for allowance.

V. Claims 1-5 and 8-13 are 35 USC 103(a) over Berndt, et al. (US6059845) in view of Hallman, et al. in further view of "Membranes of the Finest Filtration" (http://www.gewater.com/library/tp/698_Membranes_the.jsp) and Aouad, et al. (US6770615)

The USPTO states that Berndt et al. teaches cleaning fabrics and "filtering the solvent using a diatomaceous earth type spin disc filter as claimed in claim 1." Also, the USPTO states that it would have been obvious to one of ordinary skilled in the art at the time the mention was made to modify the cleaning methods taught by Berndt et al. by incorporating surfactants taught by Hallman, et al. and to modify the methods taught by Berndt et al. by incorporating the cross flow membrane filters taught in *Membranes the Finest Filtration* document because the document recites the utility of these membranes and laundry applications.

Applicants point out that the spin disc is not a filters and does not function as a filter. The spin disc provides surface area for condensing vapor, specifically, condensing either working fluid vapor, water vapor, or both when the air containing the vapor contacts the spin disc. With regard to claims 1, 2 and 11, filtering of solvent using a diatomaceous earth type spin disc filter is (Berndt et al. column 3, line 30 to column 4, line 29) not a type of cross flow filtering as claimed in claim 1, and is not a type of adsorbent bed filter as claimed in claims 2 and 11.

Also, with regard to claims 3, 4, 12 and 13, none of the cited references disclose contacting vapors from the working fluid by a spinning disc to remove the working fluid and the water vapor from the air stream as claimed by Applicants. The spinning disc functions to remove the vapor, as explained in paragraph 55, page 17, lines 1-5, of the written description, by condensing the vapor. In addition, none of the cited references discloses a cleaning method that

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further includes the step of cooling the vapor contacted by the spinning disc as recited in claim 4.

In addition, the Applicants' arguments with respect to claims 1, 2, 5, 6 and 8-11 as discussed above with respect to Hallman, et al. (US 2003/0196277) in view of "Membranes of the Finest Filtration" references also apply.

Accordingly, Applicants respectfully request the allowance of claims 1-5 and 8-13 which are believed to be in condition for allowance.

VI. Double Patenting Rejections

A. The USPTO has provisionally rejected Claims 1, 6 and 7 on the ground of non-statutory obviousness, as being unpatentable over Claims 19-27 and co-pending 10/699,262. Applicant's hereby enclose the attached unexecuted form PTO /SB/25 which is hereby provisionally filed until an attorney of record can sign it.

B. The USPTO has provisionally rejected Claims 1, 6 and 7 on the ground of non-statutory obviousness double patenting as being unpatentable over Claims 1-3, 7 and 9 of co-pending 10/698,920. Upon review of the claims of co-pending Application No. 10/698,920, Applicants do not see an issue of obviousness double patenting because claims 1, 2 and 3 of co-pending Application No. 10/698,920 do not discuss filtering. However, claims 7 and 9 recite filtering. Applicant's hereby enclose the attached unexecuted form PTO /SB/25 which is hereby provisionally filed until an attorney of record can sign it.

C. USPTO has rejected Claims 1-13 under 35 USC 101 is claiming the same invention as that of Claims 1-13 of co-pending App. No. 10/957,487. It is brought to the Examiner's attention that 10/957,487 has been amended via a Preliminary Amendment filed with the USPTO on April 19, 2006 in which claims 1-13 have been canceled. Therefore, the issue of double patenting under 35 USC 101 no longer exists.

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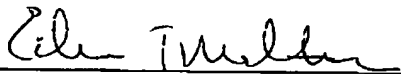
Conclusion

In summary, Applicants believes that this Amendment is fully responsive to the Office Action mailed on March 24, 2006, and that Applicants' claims include features that patentably define over the cited references. Based on the amendments to this application and the foregoing discussion, it is respectfully requested that claims 1-13 and 79-83 of this application be found in condition for allowance. If the Examiner believes there are any further matters, which need to be discussed in order to expedite the prosecution of the present application, the Examiner is invited to contact the undersigned.

It is believed that no additional fees are incurred for the additional new claims because claims 15-78 were previously canceled. Fees pertaining to the terminal disclaimers under 37 CFR 1.20(d) may be charged to our Deposit Account No. 50-0959 referencing our Docket No. US20010201 (094342.0029). In the event there are any fees necessitated by the foregoing communication, please charge such fees to our Deposit Account No. 50-0959 referencing our Docket No. US20010201 (094342.0029).

Respectfully submitted,
ROETZEL & ANDRESS

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